OCEFT PROVISIONAL HASP

1	Case / Project Name: Abound Solar Inc	2	Project Number: RP1491
3	Location: 284 N. Main St Brighton CO 80601	4	Date of Field Activities: 2012OCT15
5	Reason for Emergency Investigation: Sampling Assistance		
6	Site Map attached? ☐Yes X No		
7	Brief Description of Field Activities / Scope of Work: Sampling of suspected cadmium waste resin		
8	Work plan attached? ☐Yes X No		
9	Area served by 9-1-1? X Yes ☐No ☐Not known	10	Medical Assistance On-Site? ☐Yes X No ☐Not known
11	Ambulance (name and #): Platte Valley Ambulance Services 720-685-0451		
12	Hospital (name, address, and #): Kaiser 156 South 4th Ave. Brighton CO 80601 (303) 659-8815		
13	Emergency route: North on Main St, Right on to Longs Peak St, Right onto N 4th Ave 0.6 miles	14	Map attached? ☐Yes X No
15	Fire Department: Brighton FD 303 659-4101	16	Police: Adams County sheriff 303 654-1850
17	Site Emergency Notification/Evacuation Method: Verbal and Visual		
18	NEIC SHEMP: (b) (6), (b) (7)(C)	19	OCEFT SHEMP: (b) (6), (b) (7)(C)
20	Radiation Safety Assistance: (b) (6), (b) (7)(C) (b) (6), (b) (7)	21	Poison Control: 1-800-222-1222
22	Major Personnel Roles / Responsibilities		

	Name	Role	Division
	(b) (6), (b) (7)(C) (b) (6), (b) (7)(C)	CID Agent	CID
		Project Manager (name, #):	NEIC
		OCEFT Site Health & Safety	NEIC
		Field Support	NEIC
		Field Support	NEIC

23	Non-OCEFT or Contractor Personnel? ☐Yes X No ☐Not known *Must be HAZWOPER trained, medically cleared, respirator fit-tested*
24	POTENTIAL HAZARDS (provide details on reverse, including "other hazards")

1	***Chemical***	19	Sharp / pointed objects	37	Other biological	55	***Ergonomic***
2	Corrosive	20	Struck by or against	38	Animals	56	Over-taxation
3	Toxic	21	Caught (in, on, between)	39	Insects/spiders/etc.	57	Design flaw
4	Acutely toxic / poisonous	22	Falling object	40	Biological toxins	58	Vibration
5	Carcinogenic	23	Confined space	41	Sewage	59	Heavy lifting
6	Flammable / combustible	24	Electrical hazard	42	Contaminated food	60	Repetitive motion
7	Reactive	25	Energy release	43	Contaminated water	61	Awkward posture
8	Reactive with water	26	Air pressures >30 psi	44		62	Stress / fatigue
9	Volatile	**27**	**Slip / trip / fall**	45	***Environmental***	63	
10	Inert gases / O_2 deficiency	28	Elevated surface /ladder	46	Heat stress	64	***Radiation***
11	Oxidizer	29	Trench/excavation/pit	47	Cold stress	65	Laser
12	Cryogenic liquids / frost bite	30	Noise	48	Weather	66	Ionizing radiation: α
13	Splash	31	Automatic equipment	49	Limited visibility	67	Ionizing radiation: β
14	Explosive / shock sensitive	32	Vehicles / traffic	50	Darkness	68	Ionizing radiation: γ
15		33	Structural instability	51	Sunlight	69	Ionizing radiation: neutron
16	***Physical***	34		52	Lagoon or water body	70	
17	Explosion (chemical reaction)	35	***Biological***	53	Heavily wooded area	71	*Other (specify)*
18	Explosion (over-pressurization)	36	Pathogens	54	High altitude	72	*Other (specify)*

25	Chemical Hazard Log on reverse? ☐Yes X No	26	Safety Data Sheet attached? ☐Yes X No
27	Provisional Job Hazard Analysis (add rows as needed)		

Name of Task: sampling media filter waste, potentially high in cadmium

Sequence of Job Steps	Potential Hazards	Exposure Potential (L, M, H)	Controls and Safe Practices	PPE (Level and details)
Multi – increment sampling, obtain sample using appropriate tool	Potential inhalation hazard of Cadmium	L	Use the buddy system; use caution stepping over, around, and when lifting; be aware of sharp edges, Will wet material to avoid aerosol if the material is not dampened already	Level D with hard hat, safety shoes, and safety glasses/goggles– if incidental contact is likely will use disposable gloves and evaluate garment use. If warranted will move to Level C

Name of Task: Package samples for transportation

Sequence of Job Steps	Potential Hazards	Exposure Potential (L, M, H)	Controls and Safe Practices	PPE (Level and details)
Prepare sample tags, place with samples in bags, and place in overpack for ground transportation. Prepare chain of custody paperwork.	Chemical and Environmental	L M	Use caution when handling samples to prevent breakage.	Level D with hard hat, safety shoes, eye protection, ANSI class II safety vest, disposable gloves and move to Level C ensemble as appropriate with P100 cartridges, booties, and Tychem suits.

Name of Task:

Sequence of Job Steps	Potential Hazards	Exposure Potential (L, M, H)	Controls and Safe Practices	PPE (Level and details)

28	Hazard Assessment Methods: Visual, pH paper
29	Levels of Protection / PPE: initial entry in level D, then will switch into level C (P100 cartridges, Tychem Suits, and Booties,) when container is opened by facility
30	Control Measures (engineering, work practices, PPE): level C and water sprayer to minimize aerosol potential
31	Site Control & Security: CID
32	Spill Control: Spill response kit will be available on site
33	Decontamination Procedures: Decontamination Procedures: Personnel: Dry decontamination with careful removal of potentially contaminated PPE. To minimize decontamination concerns, disposable equipment will be used as appropriate, and personnel will observe good hygiene practices. If skin is exposed, wash thoroughly with soap and water. Wet decontamination will be setup and available. Equipment: Prior to personnel decontamination, entry team members will assess if a damp wipe of all reusable

	equipment (hand tools, measuring devices, air monitors, cameras, etc.) is needed. [if so, they will wipe the equipment and ensure its movement to the clean end of the decontamination corridor.
34	Disposal Procedures: All items will be containerized and/or double bagged and transported to NEIC for proper disposal.
35	Emergency Response: Personal Injury/Illness in potentially contaminated zone: Buddy rescue; assess injury or illness; call 9-1-1 and/or transport to appropriate medical facility. Personal Injury/Illness in clean zone: Assess injury or illness; call 9- 1-1 and/or transport to appropriate medical facility. Additional procedures: Assess onsite. Emergency equipment at site: first aid kit Procedures for response critique and follow-up: After action/project closeout meeting, and safety brief prior to work restart.
36	Communications: cell phone and verbal

This provisional HASP constitutes the minimum anticipated safety requirements for OCEFT personnel engaged in field activities at this site; however, the Case Agent / Project Manager / OCEFT Site Health & Safety Officer has the authority to change these requirements, based upon site conditions and activities. As appropriate, a standard final HASP will be prepared when more complete information is obtained. The NEIC and/or OCEFT SHEMP Managers should be contacted about any questions regarding the safety of OCEFT personnel.

Prepared by: (b) (6), (b) (7)(C)	Date: 2012OCT15
OCEFT Site Health & Safety Officer (if designated)	Date: 2012OCT15
Case Agent / Project Manager (b) (6), (b) (7)(C)	Date: 2012OCT15
NEIC SHEMP Manager	Date: 2012OCT15
OCEFT SHEMP Manager	Date: 2012OCT15
Supervisor	Date: 2012OCT15 10/15/12

Chemical Hazard Log

Chemical	TLV®	NIOSH REL	OSHA PEL	IDLH	Route of Exposure	Acute Hazards / Symptoms	Odor / Visual
Cadmium and compounds, as Cd*	TWA 0.01 mg/m3; 0.002 mg/m^3 (respirable); (suspected human carcinogen)	Cadmium fume or dust as Cd: Ca (potential occupational carcinogen)	Cadmium fume or dust as Cd: [1910.1027] TWA 0.005 mg/m3	Ca [9 mg/m3 (as Cd)]	Inhalation, ingestion	Pulmonary edema, cough, headache, chills, muscle aches, nausea	None